



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

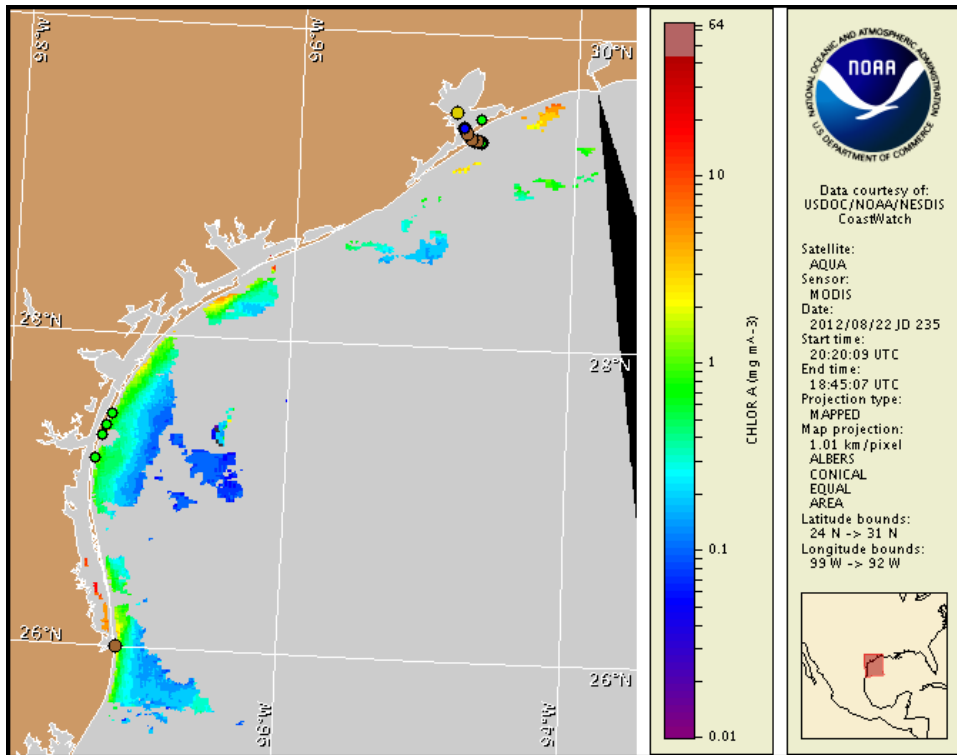
Friday, 24 August 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, August 23, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 14 to 23 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A harmful algal bloom of *Karenia brevis* is present along the Texas coast, in the Galveston region. In the Galveston area, patchy moderate respiratory impacts are possible today through Sunday. No additional impacts are expected at the coast in Texas today through Sunday, August 26. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis

****This is a supplemental bulletin. The next regular bulletin will be issued Monday, August 27.****

Karenia brevis has been identified near the Texas/Mexico border; a sample collected from Boca Chica Beach at Highway 4 indicates 'low a' concentrations (8/23; TPWD). Forecasted onshore winds today through Sunday could make patchy very low respiratory impacts possible in the Boca Chica/Brazos Island State Park region.

A harmful algal bloom of *K. brevis* remains present within Galveston Bay. The most recent samples indicate *K. brevis* concentrations at Houston Ship Channel (HSC) marker 55 have increased from 'low a' to 'medium' and remain at 'low b' at HSC 47 (8/23; TPWD).

Recent MODIS imagery (8/22; shown left) is partially obscured by clouds along- and off-shore from Sabine Pass south to Matagorda Island, limiting analysis of the Texas coastline. A patch of elevated chlorophyll (1-3 $\mu\text{g/L}$) is visible stretching from the mouth of Brazos Santiago Pass to south of the Rio Grande, in the area where a 'low a' concentration of *K. brevis* was recently identified (8/23; TPWD). However, the elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be due to the resuspension of benthic chlorophyll and sediments along the coast. In-situ sampling is necessary to confirm the presence of *K. brevis*.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 30 km south from the Galveston region, 80 km north from the Boca Chica/Brazos Island State Park region, and a potential transport of 15 km south from the Port Aransas region from August 23-27.

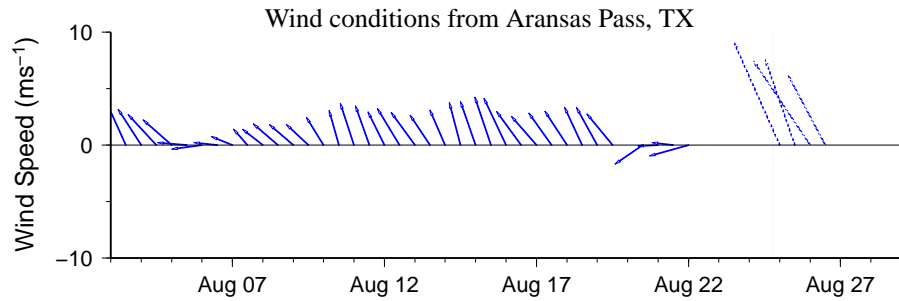
Kavanaugh, Davis

Wind Analysis

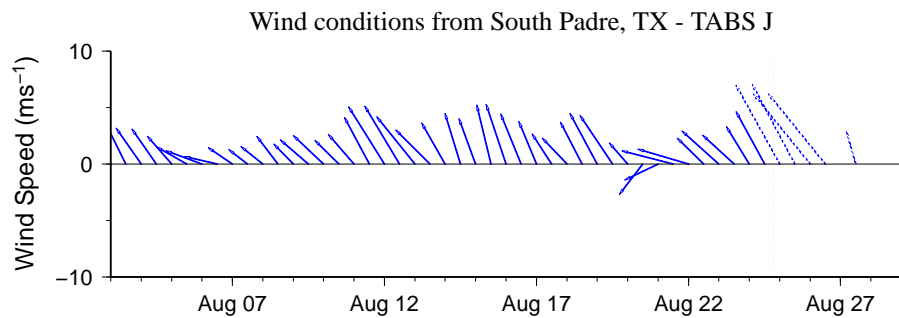
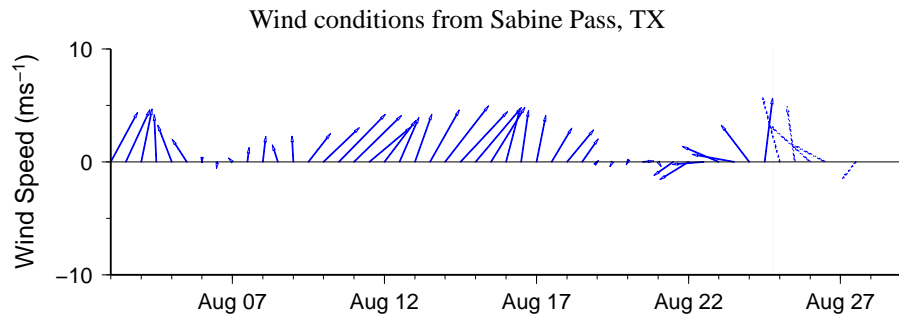
Port Aransas: South winds (10-15kn, 5-8m/s) Friday becoming southeast (10-20kn) Friday afternoon through Sunday. East winds (10-15kn) Sunday afternoon through evening.

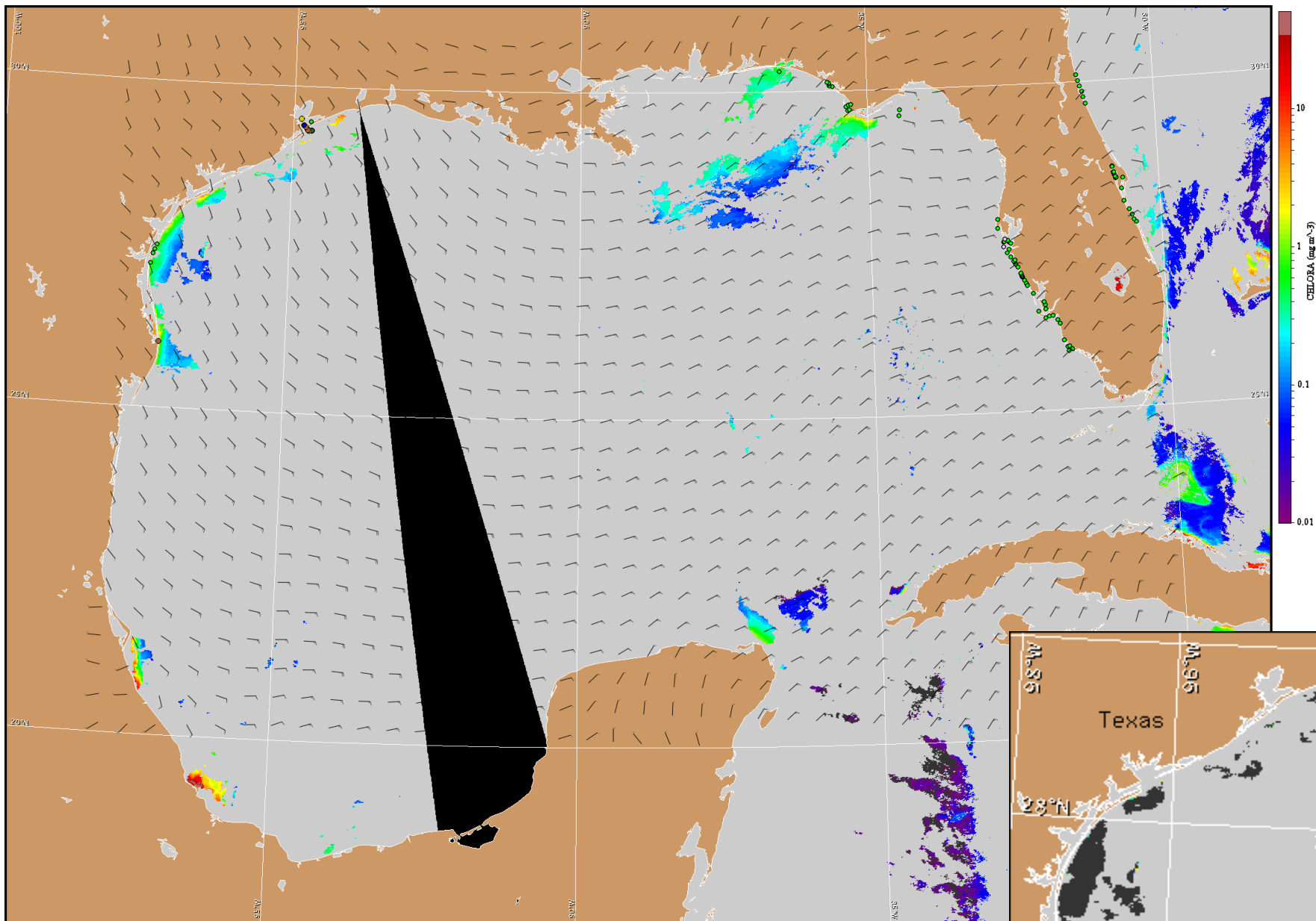
Galveston: South winds (15kn, 8m/s) today through Saturday becoming southeast (5-15kn, 3-8m/s) Saturday night through Sunday.

South Padre: Southeast winds (15-20kn, 8-10m/s) today through Sunday.



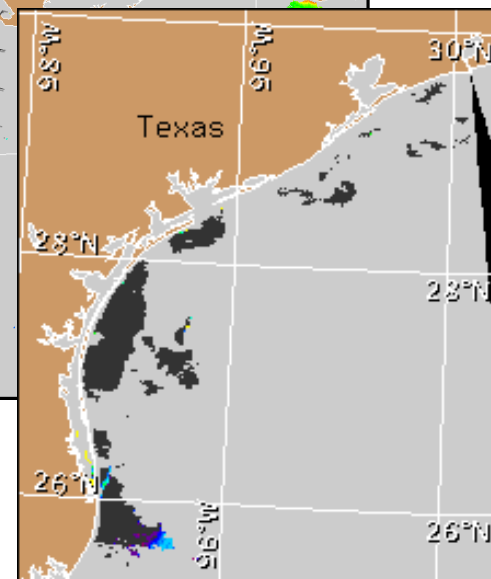
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for August 25, 2012 12Z with cell concentration sampling data from August 14 to 23 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).